AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-5. (Canceled).

6. (Previously Presented) A method for a motor vehicle having an adaptive distance and speed control for lane allocation of vehicles on multi-lane roads, comprising:

carrying out the lane allocation in a model-based manner via a frequency distribution of lateral displacements of detected radar objects by:

correlating the frequency distribution with one of (a) stored models for frequency distributions of lateral displacements, relating to lane allocation for multi-lane roads having a defined width and (b) characteristic lateral displacement histograms for different lanes used by a succeeding vehicle; and

outputting a model part having a highest correlation to the frequency distribution as a lane hypothesis.

7. (Previously Presented) A device comprising:

a lane allocation arrangement for carrying out a lane allocation in a model-based manner via a frequency distribution of lateral displacements of detected radar objects; and

a correlating arrangement for correlating a determined frequency distribution with one of (a) stored models for frequency distributions of lateral displacements, relating to lane allocation for multi-lane roads having a defined width and (b) characteristic lateral displacement histograms for different lanes used by a succeeding vehicle.

8. (Previously Presented) The device according to claim 7, further comprising:

an outputting arrangement for outputting a model part having a highest correlation to the determined frequency distribution as a lane hypothesis, the lane hypothesis including a number of lanes and a lane used by one's own vehicle.

9. (Withdrawn) A method for detecting a misalignment of a sensor on the basis of reflection, comprising:

detecting a horizontal misalignment from a position of average values for lanes in a histogram with respect to a vehicle axis.

10. (Withdrawn) A device comprising:

means for storing, with equivalent object treatment, a first histogram for a lateral displacement of a detected object and a second histogram for a distance of a detected object; and

means for determining a misalignment angle of a sensor by determining a centroid of the first and second histograms.

11. (Previously Presented) A method for performing lane allocation of consecutive vehicles on a multi-lane road, the method comprising:

determining lateral displacements of radar sensor detected objects relative to a longitudinal vehicle axis, wherein the lane allocation is implemented in a model-based manner via a frequency distribution of the lateral displacements of the radar sensor detected objects;

determining a histogram of a frequency distribution of the lateral displacements;

correlating the histogram to stored lane models; and

detecting an instantaneously driven lane of the multi-lane roadway based on a lane model having a greatest correlation to a laterally-offset histogram.

12. (Previously Presented) The method of claim 11, wherein the frequency distribution is correlated with stored models for frequency distributions of lateral displacements, relating to lane allocation for multi-lane roads having a defined width.

13. (Previously Presented) The method of claim 11, wherein the frequency distribution is correlated with the characteristic lateral displacement histograms for different lanes used by a succeeding vehicle.

14. (Previously Presented) The method of claim 6, wherein the frequency distribution is correlated with the stored models for frequency distributions of lateral displacements, relating to lane allocation for multi-lane roads having a defined width.

15. (Previously Presented) The method of claim 6, wherein the frequency distribution is correlated with the characteristic lateral displacement histograms for different lanes used by a succeeding vehicle.

16. (New) A method for a motor vehicle having an adaptive distance and speed control for lane allocation of vehicles on multi-lane roads, by using a model-based lane and misalignment detection, the method comprising:

acquiring radar object data from measured data of a radar sensor;

filtering the radar object data by at least one of (i) considering only once every object for a lateral displacement histogram, and (ii) considering every object with a weighting, the weighting depending upon how many times an object was detected in individual measurements;

registering the filtered data in a lateral displacement histogram, a frequency of the filtered object data being stored in the lateral displacement histogram as a function of the measured lateral displacement of the vehicle's longitudinal axis;

correlating an instantaneously determined, current lateral displacement histogram to every stored reference lane model, wherein a result of every correlation from the instantaneous lateral displacement histogram to one of the reference lane models is a correlation result that increases as a similarity of the instantaneous lateral displacement histogram increases as to the reference histogram;

selecting the reference histogram having a highest correlation to determine acquired information, which includes a number of lanes, a used lane, and a possible misalignment of the radar sensor; and

outputting the acquired information for processing.

17. (New) The method of claim 16, further comprising:

obtaining a histogram having a plurality of maxima according to a number of detected lanes and their relative position with respect to the vehicle in the used lane; determining a horizontal misalignment of the radar sensor from a position of average values for the lanes in the histogram with respect to a vehicle center axis, wherein in addition to a lateral displacement, a further histogram regarding a distance of an observed object is stored with an equivalent object treatment, and a misalignment angle is determined by determining a centroid of the histograms.